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CONNECTICUT GREEN BANK

Legislative Testimony of the Connecticut Green Bank
Insurance and Real Estate Committee
March 1, 2022

Regarding Senate Bill 14
AN ACT CONCERNING HOME ENERGY AFFORDABILITY FOR HOME BUYERS

As the nation's first green bank, the Connecticut Green Bank ("Green Bank") leverages the limited public resources it receives to attract multiples of private investment to scale up clean energy deployment. Since its inception, the Green Bank has mobilized $2.14 billion of investment into Connecticut's clean energy economy at a 7.4 to 1 leverage ratio of private to public funds, supported the creation of 25,612 direct, indirect and induced jobs, reduced the energy burden on over 63,000 families and businesses, deployed over 494 MW of clean renewable energy, helped avoid 9.9 million tons of CO2 emissions over the life of the projects, and generated $107.4 million in individual income, corporate, and sales tax revenues to the State of Connecticut.

The Green Bank **Supports Senate Bill 14.**

Based on the Green Bank's reading of Senate Bill 14 ("the Bill"), the Bill would:

- Provide the Department of Energy and Environmental Protection (DEEP) with purview over selection of an energy labeling standard;
- For homeowners, require provision of a home energy label to prospective buyers of their property, with qualifications and exceptions; and
- Allow municipalities civil penalty authority through ordinance adoption.

The state has a statutory weatherization target at CGS 16-245m(d)(1), indicating that the Conservation and Load Management Plan delivered by the electric distribution companies for approval of the Energy Conservation Management Board include "steps that would be needed to achieve the goal of weatherization of eighty per cent of the state's residential units by 2030." Energy labeling is among the tools that can be used to achieve the public policy objective, because it provides consumers with information as to the energy performance of their dwelling. Weatherization activities can quickly work to the economic benefit of homeowners. With the transparency proposed under this policy, consumers would know the degree of need for weatherization investments that can affect the cash flow of a property – before entering into commitments on said property.

Consideration should also be given for DEEP to conduct a study on whether or not a "resilience" label for homes should be pursued.[1] As climate change continues to impact our homes as a result of hurricanes causing flooding and power outages, heat domes and polar vortexes causing public health risks, and snow and ice storms causing roof damage (e.g., ice dams), more information for consumers on the resilience of their homes will improve security.

Please find attached to this testimony the Green Bank's Decennial Societal Impact Report, Residential Solar Investment Program wrap-up fact sheet, and Energy Storage Solutions brochure.

Questions on this document may be submitted to Matt Macunas, Legislative Liaison and Associate Director of Regulatory Policy, reachable at matt.macunas@ctgreenbank.com or at (860) 257-2889.

[1] IBHS's FORTIFIED (https://fortifiedhome.org/), Risk Footprint (https://riskfootprint.com/residential-home/) or Germany's Flood Label (https://www.floodlabel.com/)

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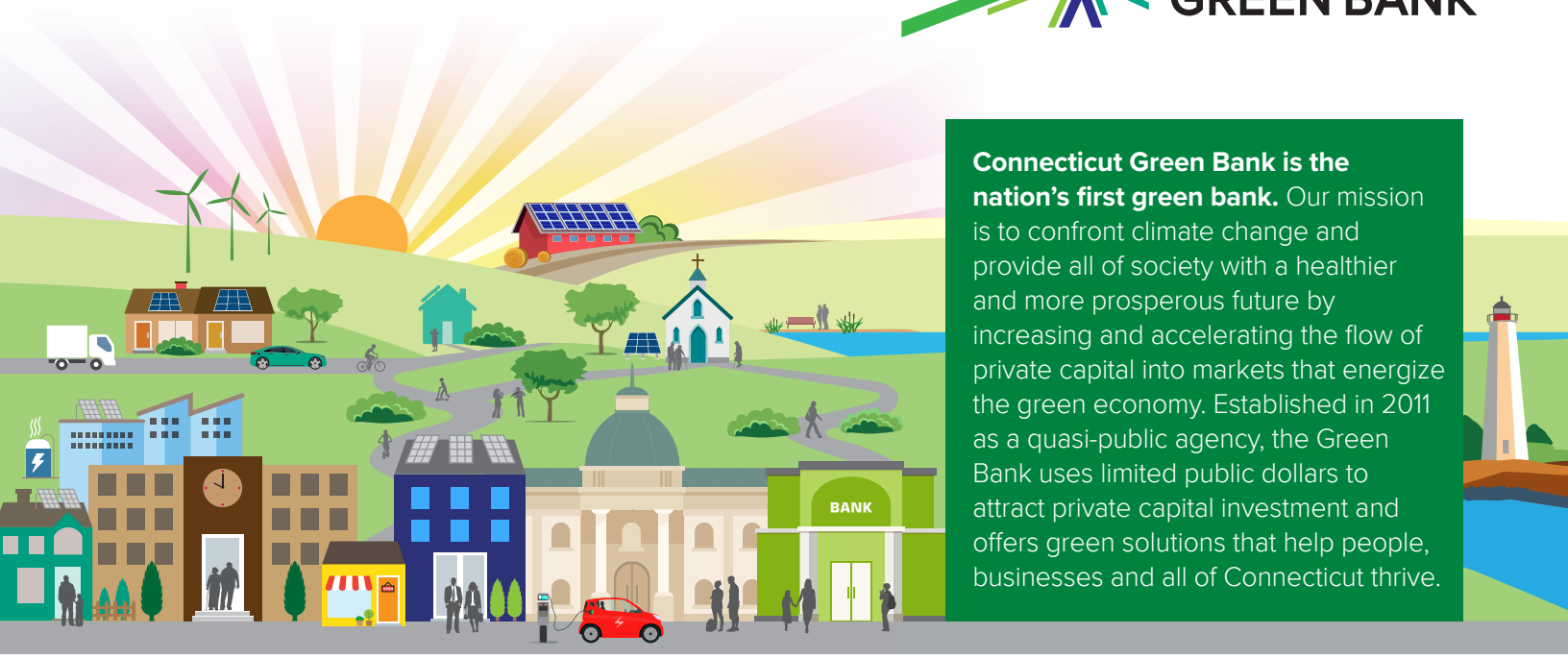
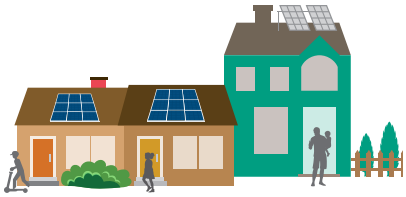


Connecticut Green Bank is the nation's first green bank. Our mission is to confront climate change and provide all of society with a healthier and more prosperous future by increasing and accelerating the flow of private capital into markets that energize the green economy. Established in 2011 as a quasi-public agency, the Green Bank uses limited public dollars to attract private capital investment and offers green solutions that help people, businesses and all of Connecticut thrive.

our solutions

The Green Bank is helping Connecticut flourish by offering green solutions for homes and buildings, and by creating innovative ways to invest in the green economy.

CONNECTICUT GREEN BANK HOME SOLUTIONS



homes

Empowering all Connecticut families and households with accessible and affordable green solutions that bring them comfort and security. Find incentives for battery storage or use the Green Bank's flexible financing to reduce costs with health and safety improvements and the newest energy efficient technologies.

CONNECTICUT GREEN BANK BUILDING SOLUTIONS

buildings

Creating stronger, more resilient communities with green solutions for buildings of all types, from businesses and nonprofits to multifamily housing and local government. Leverage Green Bank financing to save money and realize the benefits of more modern, sustainable buildings.

CONNECTICUT GREEN BANK INVESTMENT SOLUTIONS

investments

Securing a healthier planet with smart ways for individuals and businesses to invest in green solutions – and our future – while also earning a return. Energize the green economy by investing in it today. Buy a Green Liberty Bond, invest through a crowdfunding offering, or join the movement by finding other ways to invest.

Get Started. Call 860.563.0015 or visit ctgreenbank.com

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CONNECTICUT GREEN BANK

Decennial Societal Impact Report

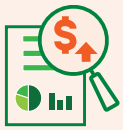
FY12 FY21

Since the Connecticut Green Bank's inception through the bipartisan legislation in July 2011, we have mobilized more than **$2.14 billion of investment** into the State's green economy. To do this, we used **$288.4 million** in Green Bank dollars to attract $1.85 billion in private investment, a leverage ratio of **$7.40 for every $1**. The impact of our deployment of renewable energy and energy efficiency to families, businesses, and our communities is shown in terms of economic development, environmental protection, equity, and energy (data from FY 2012 through FY 2021).

ECONOMIC DEVELOPMENT

JOBS The Green Bank has supported the creation of more than **25,612** direct, indirect, and induced job-years.

TAX REVENUES
The Green Bank's activities have helped generate an estimated **$107.4** million in state tax revenues.



$52.8 million individual income tax

$27.5 million corporate taxes

$27.1 million sales taxes

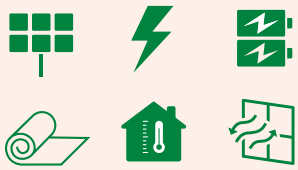
ENERGY

ENERGY BURDEN
The Green Bank has reduced the energy costs on families, businesses, and our communities.

57,000+ families

6,000+ businesses

DEPLOYMENT
The Green Bank has accelerated the growth of renewable energy to more than **494 MW** and lifetime savings of over **64.1 million MMBTUs** through energy efficiency projects.



ENVIRONMENTAL PROTECTION

POLLUTION The Green Bank has helped reduce air emissions that cause climate change and worsen public health, including **9.3** million pounds of SOx and **10.7** million pounds of NOx.

9.9 MILLION tons of CO_2 : EQUALS

163 MILLION tree seedlings grown for 10 years

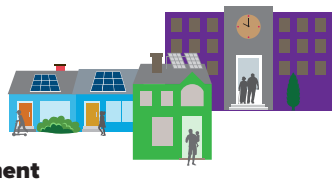
OR

2.1 MILLION passenger vehicles driven for one year

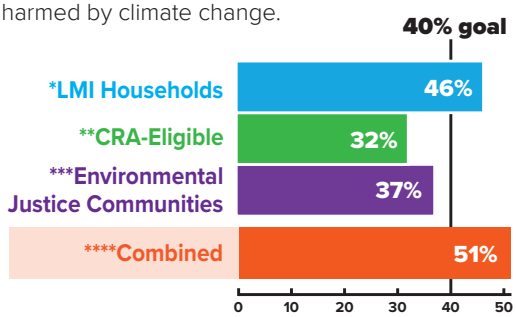
PUBLIC HEALTH The Green Bank has improved the lives of families, helping them avoid sick days, hospital visits, and even death.

$298.1 – $674.1 million of lifetime public health value created

EQUITY



INVESTING in vulnerable communities, The Green Bank has set **goals** to reach **40% investment** in communities that may be disproportionately harmed by climate change.



*LMI Households – households at or below 100% Area Median Income.

**Community Reinvestment Act (CRA) Eligible – households at or below 80% of Area Median Income and all projects in programs designed to assist LMI customers.

***Environmental Justice Community means a municipality that has been designated as distressed by Connecticut Department of Economic and Community Development (DECD) or a census block group for which 30% or more of the population have an income below 200% of the federal poverty level.

****Combined Vulnerable Communities include LMI, CRA and EJC.

Learn more by visiting ctgreenbank.com/strategy-impact/impact

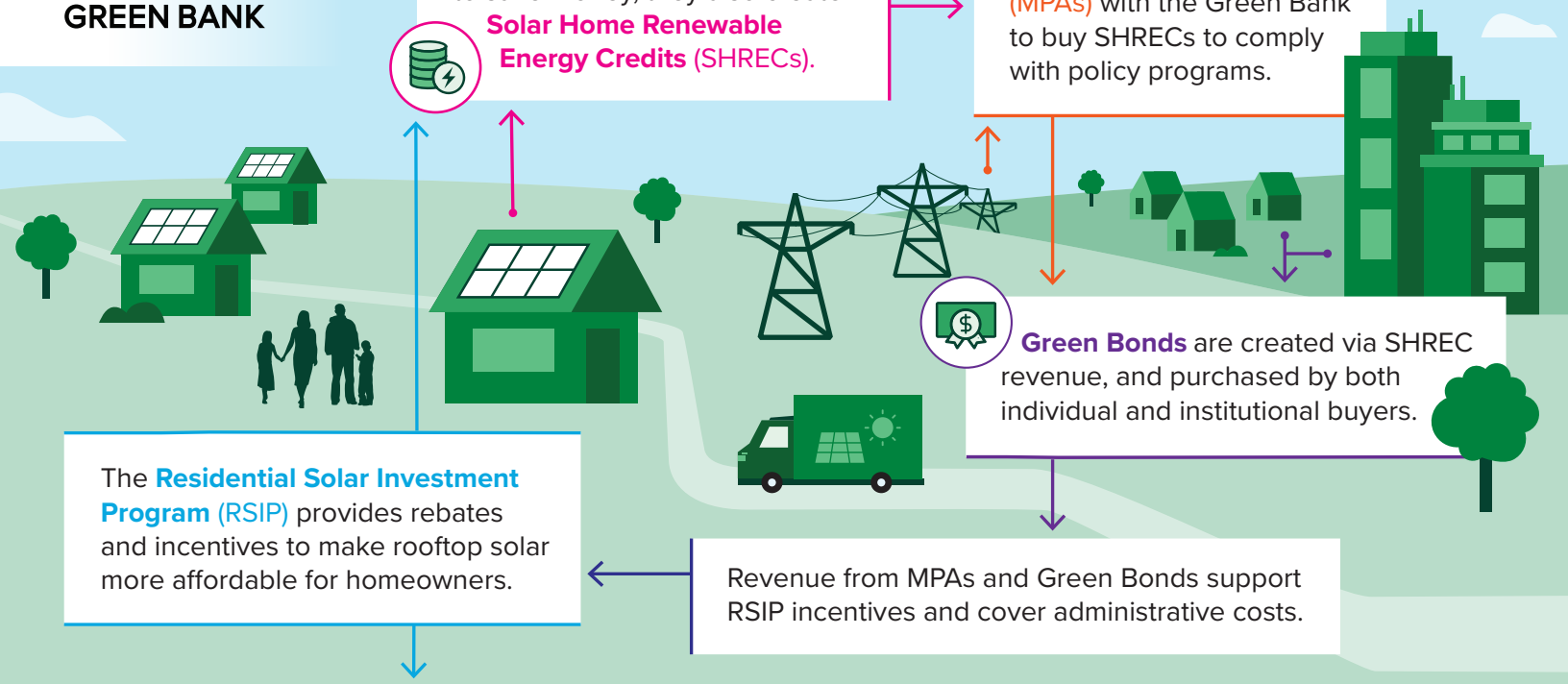
Winner of the 2017 Harvard Kennedy School Ash Center Award for Innovation in American Government, the Connecticut Green Bank is the nation's first green bank.

Sources: Connecticut Green Bank Annual Comprehensive Financial Reports.

CONNECTICUT GREEN BANK

When panels produce electricity to save money, they also create **Solar Home Renewable Energy Credits** (SHRECs).

Utilities enter into **Master Purchase Agreements** (MPAs) with the Green Bank to buy SHRECs to comply with policy programs.



Green Bonds are created via SHREC revenue, and purchased by both individual and institutional buyers.

Revenue from MPAs and Green Bonds support RSIP incentives and cover administrative costs.

The **Residential Solar Investment Program** (RSIP) provides rebates and incentives to make rooftop solar more affordable for homeowners.

Residential Solar Investment Program (RSIP)

Through a network of contractors, the Green Bank helped **43,000+ households** access solar energy since 2012, surpassing the statutory target of 350 MW one year ahead of the December 2022 deadline.

$1.33 billion
Total investment

$149.7 million
Total incentive

$0.43/W*
Incentive ($31 per Zero Emission Renewable Energy Credit Equivalent)

$3.80/W
Installed Cost

Solar Power Generation

350 MW
Capacity

9,966,706 MWh
Estimated lifetime generation

Solar and Energy Efficiency for All

- **50%** of RSIP projects have been deployed in **vulnerable communities**
- **98%** of RSIP projects had **energy audits** (i.e., Home Energy Solutions)

SHREC Backed Bonds

Consumer demand is greater than the supply of bonds, showing consumers' high interest in supporting investment to confront climate change in Connecticut.

Green bonds are certified and verified by a third-party for consumer protection.

Connecticut's Solar Industry

15,437
Jobs created

$41.9 million
Tax revenue generated

6,291 Direct | **9,146** Indirect and induced

Environmental Impact

Through the production of zero emission renewable energy, the lifetime reduction of greenhouse gases is equivalent to:

5.5 million
Tons of CO_2

606,686
Homes energy use

6.1 million
Acres of forests

12.6 billion
Miles driven

$397.8 million Public health cost reduction from cleaner air

*Average incentive over life of the program

energy storage SOLUTIONS

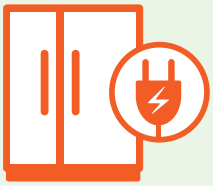
Introducing Energy Storage Solutions

Energy Storage Solutions is a new incentive program designed to help Eversource and United Illuminating customers install energy storage for their home. Installing a battery in your home can help you be prepared when extreme weather events are on the horizon. Batteries can provide backup power when the electricity goes out to keep your lights, small appliances, and medical equipment running without the need to run an onsite generator. Plus, batteries work even better when you add them to an existing solar PV system or pair them with a new one, allowing batteries to recharge with the sun's energy.

Battery Benefits

Cleaner / Quieter: Unlike generators that run on fossil fuels, batteries are a cleaner, quieter option for powering your home during an outage.

Resilient: With battery storage, you're always ready for a storm without needing to buy or store fossil fuels. Keep your lights on and your refrigerator running without the stress and hassle.



Affordable: With Energy Storage Solutions, it's more affordable than ever to purchase a battery system. Upfront and performance-based incentives allow you to save money at the time of purchase and over the life of your system. Residential customers could receive up to $7,500 upfront per installation with additional incentives as your system contributes to the utility grid. Visit **https://energystoragect.com/**.

continued >>

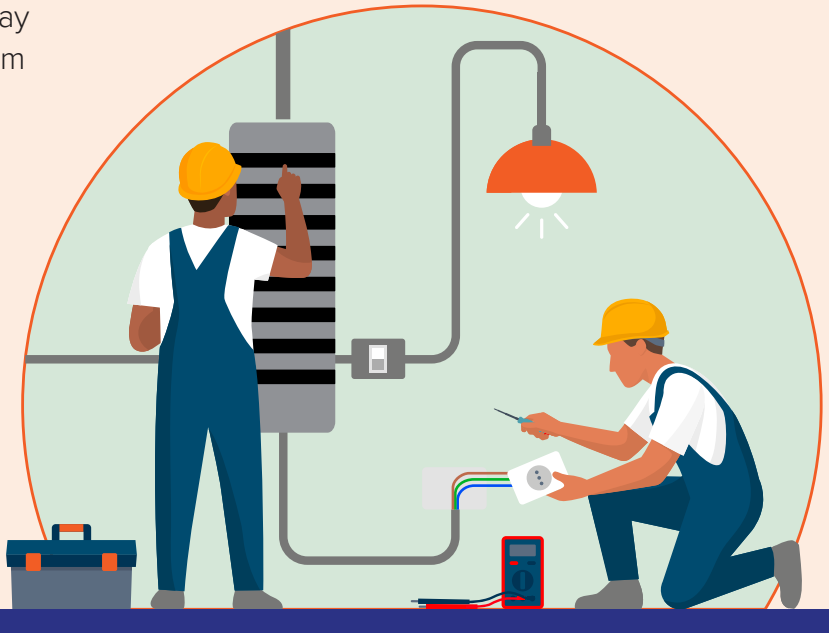
How Do I Get Started?

Talk to an eligible contractor who will help you size a battery system based on what you want to power, how long you want to power it, and where you have suitable space to install a battery system.

1 What do you want to power in an outage?
Your contractor will look at the appliances, lighting, or priority equipment you want to power in an outage to determine how much power you'll need during a power outage.

2 Where is there suitable space to install batteries?
Depending on the type, batteries may need to be located inside or outside. Your contractor may need to adjust the size of your battery system to accommodate your available space.

3 How long can the battery run without being re-charged?
The larger the battery, the longer it will be able to power your appliances and lights without being re-charged by solar PV or your homes power supply. Your contractor will help you decide on a battery size that works for the goals of your household.



To learn more about Energy Storage Solutions or get started with an eligible contractor, visit https://energystoragect.com/

energy storage SOLUTIONS

CONNECTICUT GREEN BANK EVERSOURCE UI An AVANGRID Company

This program is overseen by the Public Utilities Regulatory Authority (PURA), is paid for by ratepayers, and is administered by the Green Bank, Eversource, and UI.